

Application No. 09/414,483
Amendment dated December 3, 2004
Reply to Office Action of August 16, 2004

REMARKS/ARGUMENTS

The Examiner's indication that the previously indicate allowability of claims 29-34, 36-39 and 41 is withdrawn is noted.

In the official action under reply, claims 24, 45 and 46 were rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 4,51,596 to LONGNECKER, claims 29 - 34 and 36 and also claims 37 - 39 and 41 were rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 4,196,556 to RUSSO in view of US Patent #4,292,775 to HOWARD and GINSITE®.

In support of the rejection of claims 24, 45 and 46 as being anticipated by LONGNECKER, the Examiner states that "LONGNECKER discloses a combination building structurewherein, the vertical (A,C) and horizontal (B) lengths abut in face to face contact with the intermediate portion (K, G), the vertical flange (L,F) and the lateral flanges (LF2)."

However, it is with respect pointed out that this statement by the Examiner is a misrepresentation of the recitation of these claims.

More particularly, what claim 24 recited was:-

- - said vertical and horizontal lengths of lumber having ends in abutment with said intermediate section of said corner connector - -.

This wording was adopted specifically to distinguish over LONGNECKER, in which the ends of none of the lengths A, B and C are "in abutment" with any part of any of the metal connectors F and L. On the contrary, the side bars A and the mullion C of the window sash taught by LONGNECKER have their ends in abutment with the end bar B.

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The importance of this distinction was indicated in the REMARKS in the AMENDMENT of December 3, 2004, which are not discussed in the official action under reply.

However, to avoid an issue on this point, claim 24 is now replaced by new claim 47 so as to still further distinguish over the LONGNECKER reference.

While the LONGNECKER reference is now cited under U.S.C. 102(b), and not U.S.C. 103(b), it is believed that the following discussion of the patentable distinction of the subject matter of new claim 47 over this reference may be of assistance to the Examiner.

The LONGNECKER reference teaches only a sash, which is a part of a building which obviously is not intended to strengthen the building against loads and, in particular, against seismic loading.

In contrast, the present invention related to a building component which is intended to be useful in a building structure in order to strengthen the building structure against earthquakes, hurricanes and other large loads.

Thus, as indicated in the above previous amendment, and referring to the embodiment of the present invention shown in Figures 1 and 1A of the present application, it can be seen that the ends of the rails 14 abut the corner connector 20. This ensures the transference of compressive axial loads centrally, by parallel-to-grain stress, i.e. the optimum mode of wood loading, when the building structure is subjected to seismic loads.

In other words, when the present building structure is subjected to seismic loads, the corner connector, which absorbs most of the loads, avoids the transmission of loads from the (vertical) studs to the (horizontal) plates perpendicular to the grain of the plates. This is because the ends of the studs abut the corner connector, and not the plates. This is important in repetitive loadings in which, if the ends of the studs abutted the plates, the result would be that the stud ends would cause a softening or indentation of the plates, which would result in consequently greater wall deformation.

and decreased wall structural capacity.

In this connection, it is particularly pointed out that amended claim 24 specifically recites the vertical and horizontal lengths of lumber as "having ends in abutment with said intermediate section of said corner connector".

No such arrangement is disclosed or in any way suggested by the LONGNECKER reference, which on the contrary teaches away from this novel and advantageous corner connector arrangement by abutting the ends of parts A and C against the side of part B.

Clearly, with this prior sash structure, loads transmitted from points A and C to B will act perpendicular to the grain of part B, which is just what the present invention avoids.

Since the LONGNECKER reference is not concerned with building structures, but only with sashes, which are used in building structures but do not form parts of the building structures and are not required to resist seismic loading, this lack of relevance is not surprising.

As shown in the present drawings, the rails 14 and the side members 16, i.e. the horizontal and vertical lengths of lumber, are in abutment, longitudinally thereof, i.e. at their ends, with the corner connector side walls 33 and 35 and horizontal top wall 32, respectively.

Also, the rails 14 and the side members are in face-to-face contact, laterally thereof, with the horizontal flanges 36, 37 and the vertical flange 38, respectively.

This is a further distinction over LONGNECKER, in which the components A and C are, as indicated above, not in longitudinal abutment with any parts of the components L and which therefore does not disclose any parts in face-to-face contact with the components A - C which correspond to the vertical and horizontal flanges 37 and 38 shown in the present drawings.

It is therefore respectfully submitted that the following recitation in new claim 47:-

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-- said vertical and horizontal lengths of lumber extending at right angles to and in abutment longitudinally thereof with said horizontal top wall and said one of said side walls, respectively and being in face-to-face contact, laterally thereof, with said vertical and horizontal flanges, respectively. --

not only avoids anticipation by the LONGNECKER reference but also clearly and patentably distinguishes over the teachings of LONGNECKER.

Claims 48 - 52 each depend, directly or indirectly, from claim 47 and are therefore likewise distinguished over LONGNECKER, in addition to reciting further advantageous features of the present invention.

New independent claim 53, which is directed to "A building component", also recites the above discussed features of the corner connector and its association with the horizontal and vertical lumber lengths, and new claims 54 - 58 depend from claim 53, and therefore these claims are likewise distinguished over LONGNECKER.

Also, new method claim 59 recites the installation of corner connector and the step of:-

-- locating said vertical and horizontal lengths of lumber at right angles to and in abutment longitudinally thereof with said horizontal top walls and said side walls, respectively, and in face-to-face contact, laterally thereof, with said vertical and horizontal flanges, respectively -

claims 60 - 62 depend from claim 59 and for the above reasons it is likewise believed that these claims are distinguished over the LONGNECKER reference.

The RUSSO, HOWARD AND GINSITE references were cited against claims 29 - 34, 36 - 39 and 41, under 35 U.S.C. 103(a), but these references clearly provide no suggestion of the above-

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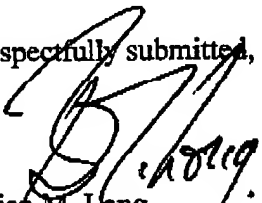
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described advantageous features of the present invention. It is therefore respectfully submitted that the new claims submitted herewith clearly and patentably distinguish over these references.

In order to provide support for the recitations of the new claims submitted herewith, pages 3 and 5 have been amended to incorporate wording corresponding to that employed in these new claims to describe features which are clearly disclosed by the originally filed specification and by the drawings of this application. However, no new subject matter has been added to the application by these amendments to the specification.

It is accordingly believed that the application is now in order for allowance, and early action to that end is courteously requested.

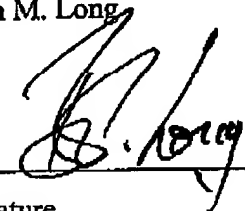
Respectfully submitted,


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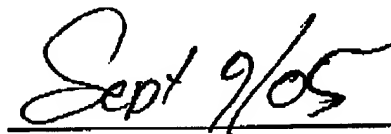
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